

EXHIBIT "A"

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The following part of the description contains additional preferred embodiments or alternative solutions of the problem of the invention.

A regenerative counterflow heat exchanger for gaseous media, in particular an air heat exchanger for ventilating rooms in buildings, with a heat exchanger drum receiving in an alternating sequence the flow of the heat-emitting and the heat-absorbing medium, the active surface of said heat exchanger drum consisting of a multilayered network, whereby at least one ventilator produces a flow of feed air and at least one ventilator a flow of exhaust air, and whereby the heat exchanger drum substantially forms a fixed outer limitation of the device.

Exclusively contactless gap seals are usefully employed as sealing elements. An outer perforated sheet metal plate is usefully in thermal contact with the face-side rings in order to maintain said rings at room temperature. A relatively "cold" inner perforated sheet metal plate is usefully maintained thermally insulated. After pulling off the drum, the face-side central bearing usefully remains in the cross bar. A face-side closure of the drum usefully consists of a transparent material, preferably of glass. After releasing one single centrally arranged fixing device, the latter usefully remains unlosably on one of the components to be separated. Highly elastic

intermediate elements are usefully employed for compensating thermal expansions between the glass pane/central bearing receptacle or outer rings/inner perforated sheet metal plate or pane installation ring/ventilator mounting or ventilator mounting/ventilator face configurations. Viewed in the direction of the axis of rotation, the longitudinal bars, which serve at the same time as sealing elements between the feed air and the exhaust air chambers, usefully divide the chamber circumference or the chamber lengths acted upon in the circumferential direction as required, so that each axial chamber section is basically complementarily acted upon by the same amounts of air. The longitudinal bar is usefully mounted thermally insulated on the installation ring. The infeed flow of the ventilators usefully takes place through a twist-absorbing element, for example through a honeycomb grid. After passing through the heat exchanger, the exhaust air usefully flows through one or a plurality of twist-absorbing elements. The ventilator rotors including their bearings usefully form a magnetically fixed unit, which is axially removable without tools. The heat of the bearings and of the motors of the ventilators is usefully transferred via a bearing tube to a counterweight located in the flow of air, said bearing tube being preferably already vibration-damped supporting in a housing, whereby the vibration damper is

preferably designed also as a sound absorber in the form of a silicone foam in order to reduce higher-frequency commutation noise. The ventilator is usefully suspended in a race in a way such that the unit is suspended in the point of gravity and that vibrations are largely damped out in their site of origin, so that the mounting can be designed very weak, which effects low development of noise and increased air capacity. The rotors usefully run in their casings with very narrow clearance. Flow-shaping elements are usefully fixed magnetically. A flow-shaping element is usefully arranged on the blow-out side on the room side, such element preventing fresh feed air from being directly received again in the upper exhaust zone. In the simplest case, said element may be a simple apron which, with the help of the air exiting from the last 10% of the heat exchanger, deflects the residual previous air by jet effect downwardly. The exhaust air on the room side is usefully exhausted from the top, and the fresh feed air is blown downwardly. The entire region within the diameter of the heat exchanger is usefully designed largely transparent. The ventilators are usefully arranged within the diameter of the heat exchanger. Both ventilators are usefully arranged at the same temperature level, preferably at the level of the outside temperature. The wall separating the chambers

is usefully removable from the bottom and is preferably fixed magnetically. The wall separating the chambers is usefully designed as a sound absorber. The space disposed on the inside usefully contains a flat stationary sound absorber located directly upstream of the closed face side of the drum. The ventilators are usefully provided with a nozzle-like inlet, the latter being at least 1.2 times larger than the diameter of the rotor, whereby the ventilator races of the inlet nozzle and the diffuser are preferably decoupled with respect to physical sound via soft intermediate elements. With insulating glazings, a controlled connection is usefully established between the intermediate space of the insulating glass pane and the outside air, , whereby the air flowing through said connection passes through a dust and moisture absorption filter, whereby the filter is preferably arranged in such a way that the filter is heated and moisture is expelled by possible sunlight irradiation, so that the filter regenerates itself automatically. The heat exchanger is usefully installed in a window. The recovery of moisture is usefully adjustable through selection of the concentration of a calcium chloride solution. Provision is usefully made for a passive combined ventilation element containing a static element providing the flow of air with a twist before said air flows through the heat exchanger and drives the latter without having to make provision for a ventilator, whereby the axis of rotation

preferably extends vertically. Regenerative heat exchanger having a rotating type of design, whereby the drive of the heat exchanger drum is generated by a flow of air provided with a twist; whereby provision is usefully made for a passive, combined ventilation element containing a static element providing a flow of air with a twist before said air flows through the heat exchanger and drives the latter without having to make provision for a ventilator, whereby the axis of rotation preferably extends vertically. An elastic ventilator bearing tube mounting, characterized in that an intermediate piece connecting the ventilator drive and a counterweight is retained by two elastic disks, the latter in turn being radially displaceable in a stationary housing and axially jointly fixable in their positions by clamping via an intermediate piece.